ABSTRACT

An 8051-based style microcontroller system which is capable of using multiple data pointers while remaining compatible with 8-bit 8051 instruction-set compatible microcontrollers. A hardware feature for selecting one of two active data pointers is incorporated into the design. The design includes circuitry for incrementing/decrementing the active data pointer. Furthermore, there is included circuitry for enabling automatic incrementing/decrementing of the active data pointer.